

IN THE CLAIMS:

This Listing of Claims replaces all prior Listings or versions of the claims in this application.

Listing of Claims

- 1-33. (Cancelled)
34. (New) An immunogenic composition, comprising:
- a) an isolated dendritic cell;
  - b) a yeast vehicle selected from the group consisting of: a whole yeast, a yeast spheroplast, a yeast cytoplasm, a yeast ghost, and a subcellular yeast particle; and,
  - c) at least one immunogen that is heterologous to the yeast vehicle and that is not expressed by or loaded into the yeast vehicle;
- wherein said dendritic cell has been loaded intracellularly with said yeast vehicle and said at least one immunogen.
35. (New) The immunogenic composition of Claim 34, wherein said immunogen is selected from the group consisting of viral antigens, mammalian cell surface molecules, bacterial antigens, fungal antigens, protozoan antigens, helminth antigens, ectoparasite antigens, and cancer antigens.
36. (New) The immunogenic composition of Claim 34, wherein said immunogen is selected from the group consisting of: HIV-1 gag, HIV-1 env, HIV-1 pol, HIV-1 tat, HIV-1 nef, HbsAG, HbcAg, hepatitis c core antigen, HPV E6 and E7, HSV glycoprotein D, and *Bacillus anthracis* protective antigen.
37. (New) The immunogenic composition of Claim 34, wherein said composition comprises multiple immunogens.
38. (New) The immunogenic composition of Claim 34, wherein said composition further comprises at least one biological response modifier.
39. (New) The immunogenic composition of Claim 34, wherein said yeast vehicle is selected from the group consisting of: a whole yeast, a yeast spheroplast, a yeast cytoplasm, and a yeast ghost.

40. (New) The immunogenic composition of Claim 34, wherein said yeast vehicle is selected from the group consisting of: a whole yeast and a yeast spheroplast.

41. (New) The immunogenic composition of Claim 34, wherein said yeast vehicle is a whole yeast.

42. (New) The immunogenic composition of Claim 34, wherein said yeast is a nonpathogenic yeast.

43. (New) The immunogenic composition of Claim 34, wherein said yeast is of a genus selected from the group consisting of *Saccharomyces*, *Candida*, *Cryptococcus*, *Hansenula*, *Kluyveromyces*, *Pichia*, *Rhodotorula*, *Schizosaccharomyces* and *Yarrowia*.

44. (New) A method to produce an immunogenic composition, comprising loading a dendritic cell intracellularly with:

a) a yeast vehicle selected from the group consisting of: a whole yeast, a yeast spheroplast, a yeast cytoplasm, a yeast ghost, and a subcellular yeast particle; and,

b) at least one immunogen that is heterologous to said yeast vehicle and that is not expressed by or loaded into the yeast vehicle.

45. (New) The method of Claim 44, wherein said step of loading a dendritic cell is accomplished by a method selected from the group consisting of: diffusion, active transport, liposome fusion, electroporation, phagocytosis, and bath sonication.

46. (New) An immunogenic composition produced by the method of Claim 44.

47. (New) A method to elicit an antigen-specific humoral immune response and an antigen-specific cell-mediated immune response in a mammal, said method comprising administering to said mammal the immunogenic composition of Claim 34.

48. (New) The method of Claim 47, wherein said immunogenic composition is administered by a route selected from the group consisting of: intravenous, intraperitoneal, subcutaneous, intradermal, intranodal, intramuscular, transdermal, inhaled, intranasal, oral, intraocular, intraarticular, intracranial, and intraspinal.

49. (New) The method of Claim 47, wherein said immunogenic composition is administered with a pharmaceutically acceptable excipient.

50. (New) A method to elicit an antigen-specific humoral immune response and an antigen-specific cell-mediated immune response in a mammal, said method comprising administering to said mammal the immunogenic composition of Claim 46.